

**ABSTRACT:**

Currently, there are various wireless technologies available, for instance Bluetooth, Infrared (IR), ZigBee, Radio Frequency (RF) and etc. Radio frequency (RF) module is a wireless device that basically works on either 413 MHz or 315 MHz frequency. Basically, the module doesn't contain any protocol and it will broadcast the signal with no security included. RF only supports star topology and the wireless range can cover up to 100 meters. Bluetooth is a wireless technology that had been introduced 10 years ago for short-range communication. Bluetooth technology is developed to be used in Personal Area Network (PAN) network for low power communication between devices such as phones, personal computers (PC), Personal Digital Assistance (PDA) and etc [1]. The range for Bluetooth wireless device can be up to 10 meters with 2.5mW (4dBm) power consumption. Bluetooth operates in unlicensed Industrial Scientific-Medical (ISM) band at 2.4 GHz with the capability of frequency hopping [1] and it only supports star topology communication.